

Amendments to the Claims

The following Listing of Claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1-12 (canceled)

Claim 13 (previously presented): An image sensor system, comprising:
an active image sensing device structure comprising an array of light sensing elements;

a color filter array comprising an array of color filters each disposed over a respective light sensing element, wherein light travels from each color filter to a respective light sensing element through a respective light transmission path substantially transmissive to radiation in a visible wavelength range; and

a bottom antireflection coating disposed in each light transmission path between the color filter array and the active image sensing device structure, wherein the bottom antireflection coating has a thickness less than approximately 200 nm.

Claim 14 (original): The system of claim 13, wherein the bottom antireflection coating comprises a dyed organic film-forming material.

Claim 15 (original): The system of claim 13, wherein the bottom antireflection coating comprises a light-absorbing polymeric film-forming material.

Claim 16 (original): The system of claim 13, wherein the bottom antireflection coating has a thickness selected to improve an optical transmission characteristic of one or more colors of the color filter array.

Claim 17 (original) The system of claim 13, wherein the bottom antireflection coating is substantially transmissive to radiation in a wavelength range of about 400 nm to about 700 nm.

Claim 18 (original): The system of claim 13, wherein the color filter array comprises a plurality of colored photoresist structures.

Claim 19 (original): The system of claim 13, wherein the bottom antireflection coating has a substantially higher plasma etch rate than the color filter array.

Claim 20 (original): The system of claim 13, wherein the active image sensor device structure comprises a complementary metal-oxide-semiconductor (CMOS) image sensor.

Claim 21 (canceled)

Claim 22 (currently amended): The system of claim 13 ~~[[1]]~~, wherein the bottom antireflection coating has a thickness of about 60 nm.

Claim 23 (previously presented): The system of claim 13, wherein the bottom antireflection coating is present only in regions directly under color filter array material.

Claim 24 (previously presented): The system of claim 13, wherein the color filter array is formed directly on bottom antireflection coating material.